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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,451		02/22/2005	Veli Kasma	METSO-21	1379
36528	7590	04/20/2005		EXAM	INER
STIENNO	N & STII	ENNON	PARKER, FREDERICK JOHN		
612 W. MA	IN ST., SI	JITE 201			•
P.O. BOX 1	667		ART UNIT	PAPER NUMBER	
MADISON.	WI 537	01-1667	1762	•	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		N				
	Application No.	Applicant(s)				
•	10/507,451	KASMA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Frederick J. Parker	1762				
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet v	ith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory perion - Failure to reply within the set or extended period for reply will, by state than the period for reply will be supplied to the period for reply will be supplied t	N. 1.136(a). In no event, however, may a eply within the statutory minimum of th od will apply and will expire SIX (6) MO ute, cause the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
•—	his action is non-final.					
;						
closed in accordance with the practice unde		•				
Disposition of Claims						
4) ☐ Claim(s) 8-16 is/are pending in the application 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 8-16 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Exami 10)☒ The drawing(s) filed on 22 February 2005 is/ Applicant may not request that any objection to the Replacement drawing sheet(s) including the corn 11)☐ The oath or declaration is objected to by the	are: a) accepted or b) the drawing(s) be held in abeyatection is required if the drawin	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for forei a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a light	ents have been received. ents have been received in riority documents have bee eau (PCT Rule 17.2(a)).	Application No n received in this National Stage				
Attachment(s)	•					
1) X Notice of References Cited (PTO-892)		Summary (PTO-413)				
2)		(s)/Mail Date Informal Patent Application (PTO-152)				
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date <u>9-13-04</u>. 	6) Other:					

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The title is too generic.

Claim Objections

3. Claim 8 is objected to because of the following informalities: claim 8, "coated" should be inserted before "web" for clarity. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 10,11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - Claims 10,11 are vague and indefinite because the relative term "hard" does not convey nor distinctly claim the intended hardness of the rolls.

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 8. Claims 1-12,15,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tholome FR 1436020 in view of Williams Jr et al US 3549403.

Tholome teaches an electrostatic coating process for simultaneously coating both sides of a continuous paper substrate (web) (fig. 2). Electrostatic applicators of practically the same potential but of opposite sign are placed on opposing sides of the substrate so the charged particles delivered by one applicator of a given sign are attracted to the substrate surface by the opposite sign of particles applied by the other applicator of opposing sign on the opposite side, following the fundamental principle of electrostatic coating. (see last page of translation). The particles may be solids or liquids, without further limitation. Finishing the coated surfaces through a nip comprising heated members is not cited.

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Williams Jr teaches applying powder (preferably electrostatically) to a paper sheet, and then the coated sheets are subjected to hot compression rolling to form an adherent, bonded coating (col. 2, 11-35; col. 3, 6-22). Rolls containing heating means 34,36 form a nip between which the coated sheet passes for compression and fusion. The rollers are heated to temperatures exemplified (EX 1-14) by 300F/ 149C to 325F/163C which overlaps the range of claim 12. The subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made if the overlapping portion of the temperatures disclosed by the reference were selected because overlapping ranges have been held to be a prima facie case of obviousness, see In re Wortheim 191 USPQ 90. The rollers necessarily possess a hardness greater than the paper to accomplish compression.

While roughness of the rolls of Williams Jr is not disclosed, per claim 11, it teaches the compressed coatings must be uniform so the rollers must be machined to a sufficient degree of smoothness to achieve such uniformity as determined by one of ordinary skill for a desired enduse application.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Tholome by incorporating the heated compression rolls of Williams Jr et al to provide a uniform coating adherently bonded to the paper substrate.

9. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tholome FR 1436020 in view of Williams Jr et al US 3549403 alone, or further in view of Liberto.

Tholome and Williams Jr et al are cited for the same reasons previously discussed, which are incorporated herein. Use of corona discharge electrodes are not expressly taught. However, it is

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the Examiner's position that the electrical schematic of figure 2 of Tholome depicts corona discharge, the specific charge from the high voltage source applied to the electrodes forming charged ions which, in turn, charge the powder being propelled at the substrate to form an electrostatic powder coating. This principle is shown by Liberto which supports the Examiner's position. While Tholome shows pipe openings as electrode means, it is the Examiner's position that the skilled artisan would have known to substitute any functionally equivalent electrode means, such as the wire-shaped electrodes of claim 14, because of the expectation of charging the coating particles.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Tholome in view of Williams Jr et al using the corona electrodes inferred by Tholome, or alternatively further as described by Liberto, because of the expectation of electrostatically charging powder coating particles being applied to a substrate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meeks Timothy can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner Art Unit 1762

fjp